Amendments to the Specification

Please replace the paragraph beginning at page 5, line 7, with the following rewritten paragraph:

FIG. 22 shows an exemplary structure of a sending and receiving device 96 for transmitting an S/PDIF frame via a twisted pair cable. In FIG. 22, an S/PDIF frame (serial data) which is output from the S/PDIF controller 91 is converted into parallel data in units of 2 bits by an s/p conversion section 97. An octonary mapping section 98 maps 2-bit data which is sequentially output from the s/p conversion section 97 to a predetermined signal level as one symbol. (More accurately, the octonary mapping section 98 maps each symbol to a change amount from the immediately previous symbol, but this will not be described in detail here.) FIG. 23 shows an exemplary result of processing performed by the octonary mapping section 98. The result of processing performed by the octonary mapping section 98 is converted into an analog signal by a D/A conversion section 99 and then is output to a twisted pair cable 105 via a differential driver 100. Although not shown, the sending and receiving device 96 includes, for example, a digital filter such as a roll-off filter or the like on a stage after the octonary mapping section 98, and also adequately includes an analog filter on, for example, a stage after the D/A conversion section 99.

Please replace the paragraph beginning at page 11, line 15, with the following rewritten paragraph:

A data receiving device (26) according to the present invention is for receiving a transmission signal which is sent in the state where each symbol of sending data is mapped to any one of a plurality of signal levels (+1.5, +0.5, -0.5, -1.5), and comprises a distinguishing symbol detection section (30) for detecting a distinguishing symbol for distinguishing a data section and a non-data section (header section) of the transmission signal from each other based on a change pattern of signal levels of the transmission signal; a data determination section (34)

for reproducing data from the data section of the transmission signal based on a detection result of the distinguishing symbol detection section; and a non-data determination section (32) for reproducing non-data information (header information) from the non-data section of the transmission signal based on the detection result of the distinguishing symbol detection section. When a signal level of a symbol in the transmission signal and a signal level of an immediately previous symbol thereto have the same higher/lower relationship as each other with respect to a reference level, the distinguishing symbol detection section detects the symbol as a distinguishing symbol.

Please replace the paragraph beginning at page 14, line 13, with the following rewritten paragraph:

First, a data sending device and a data receiving device according to Embodiment 1 of the present invention will be described. FIG. 1 shows a structure of the data sending device. In FIG. 1, a data sending device 10 includes a quaternary mapping section 12 for performing quaternary mapping on sending data, a D/A conversion section 20 for converting a digital signal which is output from the quaternary mapping section 12 into an analog signal, and a differential driver 22 for sending symmetrical signals to two cables of a twisted pair cable 24 based on the post-D/A conversion signal. Although not shown, a digital filter such as a roll-off filter or the like is provided on a stage after the quaternary mapping section ~~128~~ 12, and an analog filter is adequately provided on, for example, a stage after the D/A conversion section 20.

Please replace the paragraph beginning at page 24, line 9, with the following rewritten paragraph:

In this embodiment, the distinguishing symbol detection section 30 monitors the outputs from the difference calculation section 36 and, when 0 is output as a difference calculation result of a symbol, detects this symbol as the distinguishing symbol. Needless to say, however, in the case where, for example, the mapping method of the distinguishing symbol in the data sending

device 10 is different from that in this embodiment, the operation of the distinguishing symbol detection section 30 needs to be optimized accordingly. For example, in the case where the signal level of the distinguishing symbol is set such that the polarity of the signal level of the distinguishing symbol (the higher/lower relationship of the signal level of the distinguishing symbol with respect to the reference level) is the same as the polarity of the symbol immediately before the distinguishing symbol, the distinguishing symbol detection section 30 can detect the distinguishing symbol by monitoring a change in the polarity of the receiving signal, not by monitoring the difference calculation result of the difference calculation section 36. Alternatively, for example, in the case where the signal level of the distinguishing symbol is set to be equal to or higher than the signal level of the symbol immediately before the distinguishing symbol when the signal level of the symbol immediately before the distinguishing symbol is higher than the reference level, and the signal level of the distinguishing symbol is set to be equal to or lower than the signal level of the symbol immediately before the distinguishing symbol when the signal level of the symbol immediately before the distinguishing symbol is lower than the reference level, the distinguishing symbol detection section 30 can detect the distinguishing symbol by monitoring a change in the sign of the difference calculation result.

Please replace the paragraph beginning at page 27, line 22, with the following rewritten paragraph:

The quaternary determination section 28 outputs header information and ~~sending~~ receiving data reproduced based on the transmission signal sent from the data sending device. The header information and the ~~sending~~ receiving data are respectively input to the header generation section 46 and the biphase encoder 48. The header generation section 46 generates a header section of an S/PDIF frame as shown in FIG. 20 based on the header information from the header determination section 32 and outputs the header section. On the other hand, the biphase encoding section 48 biphase-mark-encodes the ~~sending~~ receiving data which is output from the data determination section 34, and outputs the encoding result as a data section of the S/PDIF

frame. In this manner, the S/PDIF frame transmitted by the data sending device is reproduced by the header generation section 46 and the biphase encoder 48. In the structure shown in FIG. 13, the header generation section 46 and the biphase encoder 48 are independently provided from the quaternary determination section 28. The present invention is not limited to this, and, for example, the header determination section 32 and the data determination section 34 may be respectively structured to have the functions of the header generation section 46 and the biphase encoder 48.